Abstract

Method and device for reducing the crest factor of a signal

5   In a signal which is used, in particular, for data transmission by the method of discrete multitone modulation, in order to change and in particular to reduce the crest factor, it is known to store the signal in the form of individual sampling values in a signal vector (y),

10   as a function of which, a correction vector (Δy) is calculated to be superimposed on the signal vector (y). When the frequency components of the corrected signal vector are to be changed by filtering, the crest factor is in certain circumstances disadvantageously increased again.

15   According to the invention, to change the crest factor, the correction vector (Δy) is therefore superimposed on the signal vector (y) after prior filtering. Advantageously, the sampling frequency is doubled in the prior filtering and the elements of the signal vector (y) which has been

20   doubled with respect to the sampling frequency are alternately divided over two part signal vectors. The crest factor is then changed in that for each part signal vector a correction vector is independently calculated and is superimposed on the respective part signal vector. The

25   corrected part signal vectors are then combined again alternately to form a signal vector which has been doubled with respect to sampling frequency.

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(Fig. 2)